

AUTHOR INDEX

Bertolino, F., 239
Burford, R. L., 217

Carroll, J. D., 185

de Leeuw, J., 159
De Soete, G., 185
Desarbo, W. S., 185

El-Shishiny, H., 231
Espahbodi, H., 1
Espahbodi, P., 1

Fan, L. T., 13
Forgeard, F., 35
Fox, D. R., 101

Gaul, W., 273
Gheva, D., 55

Helms, B. P., 89
Herbert, J. H., 149
Herrin, G. D., 79

Jaraiedi, M., 79
Jean, W. H., 89

Katz, J. L., 217

Mansour, H., 231
Mau, J., 283
McNickle, D. C., 65
Menaldi, J.-L., 205
Mendelson, H., 115

Nassar, R., 13
Neogi, D., 13

Ramaswamy, V., 185
Robin, M., 205

Sahin, I., 173
Schader, M., 273
Schoentgen, J., 127
Shoukry, E. M., 143

Tallur, B., 35
Tehranian, H., 1

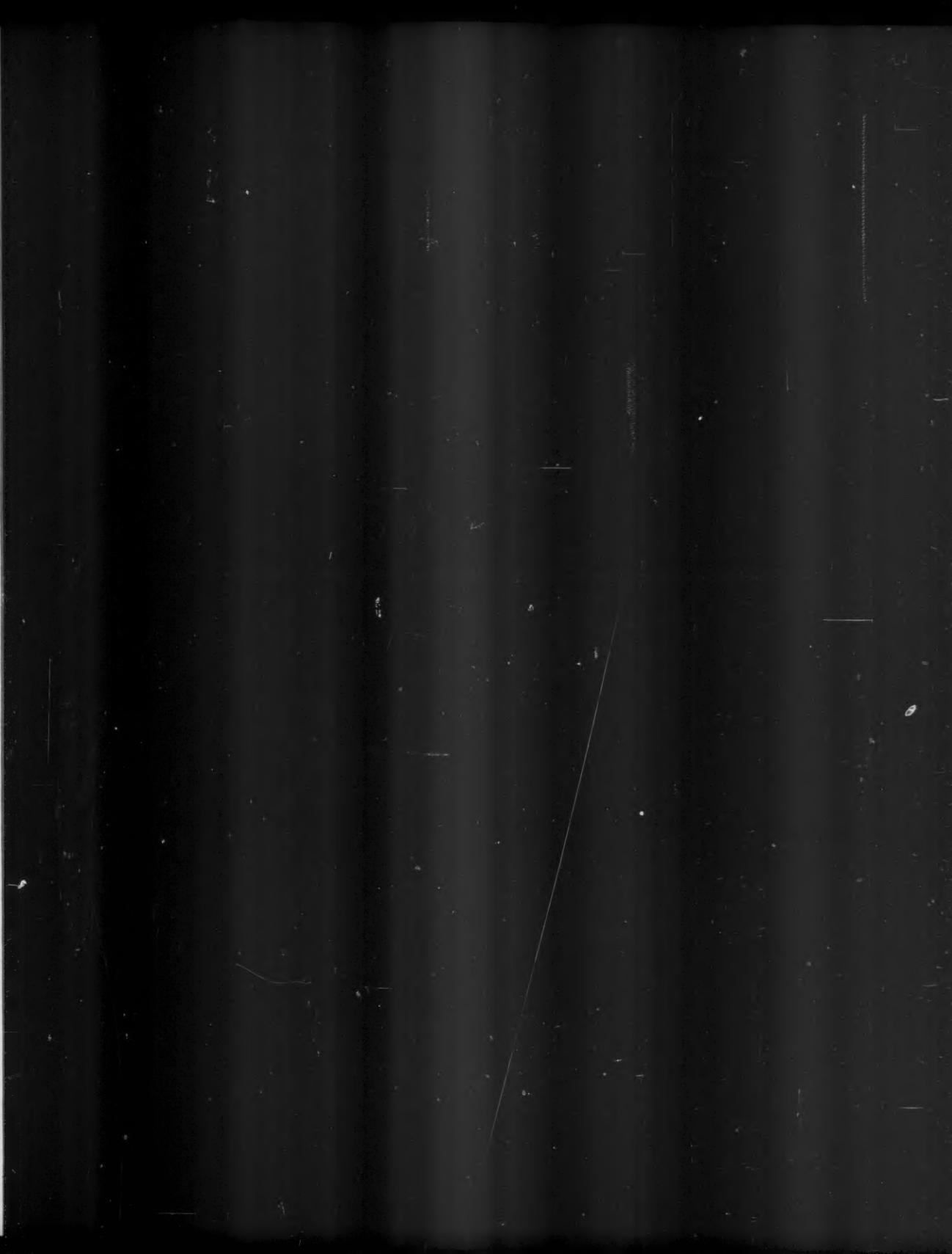
van der Burg, E., 159

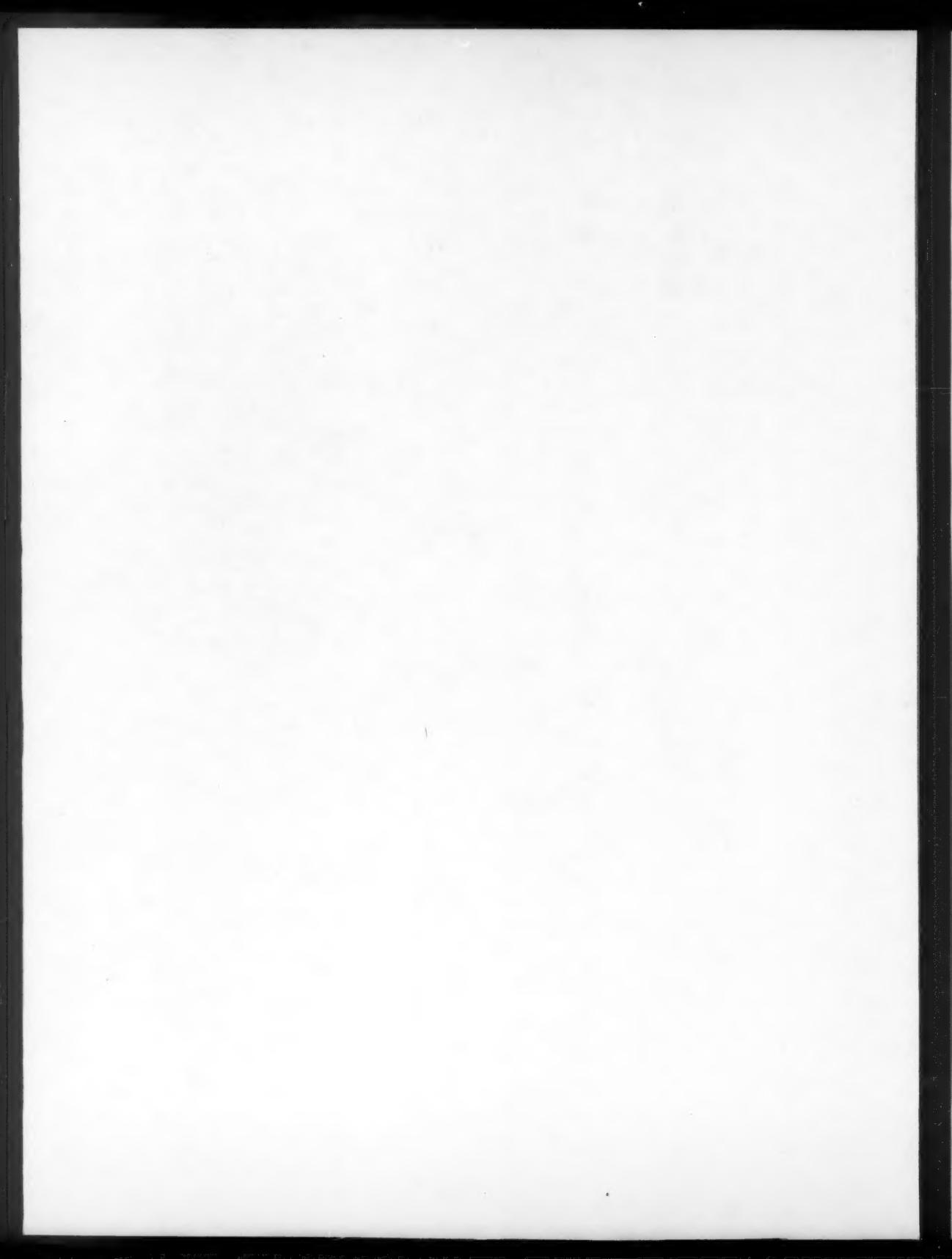
Walawender, W. P., 13
Williams, B. K., 253

Yutani, N., 13

KEY WORD INDEX

Aalen plots, 283
 Absorption, 217
 Adaptive expectations, 1
 Aggregation, 273
 Autocorrelation, 13
 Biplot, 55
 Bootstrap, 159
 Bound improvement, 253
 Canonical correlation analysis, 159
 Censoring, 283
 Chernoff-Kullback-Kailath region, 239
 Classification and discrimination of a specific group, 239
 Cluster analysis, 273
 Clustering analysis, 127
 Confidence interval, 159
 Contiguity restraint, 35
 Contraction, 253
 Correlations, 65
 Counting process, 283
 Covariance, 231
 Curve fitting, 79
 Cutpoint decomposition, 101
 Data analysis, 149, 273
 Delta method, 159
 Distance, 273
 Distribution of stock returns, 115
 Dummy variables, 149
 Dynamic programming, 205
 Econometrics, 149
 Estimate of misclassification, 239
 Estimation, 217, 231
 Finance, 89
 Fluidized bed, 13
 Hierarchical classification, 35
 Illness-death process, 283
 Information content, 1
 Inspection error, 79
 Intree enumeration, 101
 Inventory theory, 173
 Investments, 89
 Jack-knife, 159
 Jackson networks, 65
 Laryngeal pathology features, 127
 Likelihood of the links algorithm 35
 Lorenz curve, 115
 Mahalanobis distance and observation shape, 239
 Maintenance, 205
 Market efficiency, 1
 Market structure analysis, 185
 Markov chains, 217
 Markov decision process, 253
 Markov processes, 101
 Maximum likelihood, 185, 231
 Measure of association, 35
 Merit factor, 127
 Multi-state survival, 283
 Multi-step regression, 283
 Multidimensional multivariate system, 55
 Multiple comparison test, 149
 Natural gas demand, 149
 Necessary conditions, 89
 Non-linear transformation, 159
 Non-parametric tests, 115
 Optimality conditions, 173
 Optimization, 253
 Ordinal data, 273
 Paired comparisons data, 273
 Paired comparisons, 185
 Partial adjustment, 1
 Plant recolonization, 35
 Plant species, 35
 Power spectrum, 13
 Preference trees, 185
 Pressure fluctuations, 13
 Pure death process, 143
 Quantile-preserving spread, 115
 Queue lengths, 65
 Queueing systems, 205
 Queueing, 101
 Random matrix, 217
 Random search, 231
 Regression analysis, 149
 Relations, 273
 Relative discriminant contribution, 239
 Sebestyen approach, 239
 Security returns, 1
 Signal detection theory, 79
 Social choice theory, 273
 Stability in a system, 55
 Stationary analysis, 173
 Stochastic dominance, 89
 Stochastic model, 13
 Time series, 13
 Transition diagrams, 101
 Ultrametric trees, 185
 Variance components, 231





Applied Stochastic Models and Data Analysis

Contents

VOLUME 4 NUMBERS 1-4 1988

NUMBER 1

Insurance, economics and finance

H. ESPAHBODI, P. ESPAHBODI AND H. TEHRANIAN
An Alternative Description of the Stochastic Process Generating Security Returns 1

Physics and chemistry

D. NEOGI, L. T. FAN, N. YUTANI, R. NASSAR AND W. P. WALAWENDER
Effect of Superficial Velocity on Pressure Fluctuations in a Gas-Solid Fluidized Bed: a Stochastic Analysis 13

Clustering and classification: Factorial analysis

B. TALLUR AND F. FORGEARD
Study of the Plant Recolonization Process in a Burnt Heathland using a Method of Hierarchical Classification 35

Factorial analysis

D. GHEVA
Diagnosing Departures from Stability in a Multidimensional Multivariate System 55

Marketing, production, planning and inventory: Queueing

D. C. McNICKLE
Lagged Correlations in Simple Queueing Networks 65

Book Review

73

NUMBER 2

In Memoriam: Louis Guttman (1916-1987) 75

Statistical validation: Marketing, production, planning and inventory

M. JARAIEDI AND G. D. HERRIN
A Non-parametric Method for Fitting ROC Curves for Evaluation of Industrial Inspection Performance 79

Insurance, economics and finance

W. H. JEAN AND B. P. HELMS
Necessary Conditions for Stochastic Dominance: A General Approach 89

Indexed or abstracted by Cambridge Scientific Abstracts, Current Index to Statistics, Engineering Index, Executive Sciences Institute, Mathematical Reviews, Statistical Theory and Method Abstracts, and Zentralblatt für Mathematik

Queueing

D. R. FOX
Block Cutpoint Decomposition for Markovian Queueing Systems 101

Statistical validation: Insurance, economics and finance

H. MENDELSON
Testing Quantile-preserving Spreads 115

Natural language processing: Clustering and classification

J. SCHOENTGEN
Performance of Jitter in Discriminating Between Normal and Dysphonic Speakers—Presentation of Problem 127

Book Reviews

137

Announcement

141

NUMBER 3**New applicable models**

E. M. SHOUKRY
A General Pure Death Process Model and the Distribution of the Time Required to Remove a Fixed Number of Elements 143

Environment and energy: Insurance, economics and finance

J. H. HERBERT
A Data Analysis of Residential Demand for Natural Gas using Step-down Multiple Comparison Tests 149

Statistical validation

E. VAN DER BURG AND J. DE LEEUW
Use of the Multinomial Jack-knife and Bootstrap in Generalized Non-linear Canonical Correlation Analysis 159

Marketing, production, planning and inventory

I. SAHIN
Optimality Conditions for Regenerative Inventory Systems under Batch Demands 173

Marketing, production, planning and inventory: Clustering and classification

W. S. DESARBO, G. DE SOETE, J. D. CARROLL AND V. RAMASWAMY
A New Stochastic Ultrametric Tree Unfolding Methodology for Assessing Competitive Market Structure and Deriving Market Segments 185

Queueing: Automatics, filtering, decision and control

J.-L. MENALDI AND M. ROBIN
On the Control of Queueing Systems with Failures and Repairs 205

Announcements

215

NUMBER 4

Statistical validation: New applicable models**J. L. KATZ AND R. L. BURFORD****Estimating Mean Time to Absorption for a Markov Chain with Limited Information**

217

Statistical validation**H. EL-SHISHINY AND H. MANSOUR****A New Method for the Estimation of Variance Components Directly from the Sample Covariance Matrix**

231

Clustering and classification**F. BERTOLINO****On the Classification of Observations Structured into Groups**

239

Decision and control**B. K. WILLIAMS****MARKOV: A Methodology for the Solution of Infinite Time Horizon Markov Decision Processes**

253

Clustering and classification**W. GAUL AND M. SCHADER****Clusterwise Aggregation of Relations**

273

New applicable models: Biology, biometrics, biomedicine and health care**J. MAU****A Comparison of Counting Process Models for Complicated Life Histories**

283

Announcement

299

Author Index

301

Key Word Index

302